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ABSTRACT

Because good health and good learning go hand-in-hand, school health issues today are being discussed in the context of school reform. State education agencies can be catalysts to help communities make the critical link between health and education and move beyond the confines of the health room to discuss the role of schools in meeting the health needs of young people. The chapters in this guide, written for chief state school officers and their health staffs, include: "Putting Health Programs in the School Context"; "Looking at the Health Needs of Children & Youth"; and "Understanding the Characteristics & Components of Comprehensive School Health Programs." Chapter 4, "Addressing HIV/AIDS Through School Strategies & Programs," gives an overview of specific programs, including information on how to contact program personnel. Seventy-eight references are listed. (IAH)

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Beyond the Health Room

Because poor health leads
to poor learning,
school health programs
today must go beyond
simply providing
a health room
and a part-time nurse,
or offering
a semester of
health education.

The health problems
of the children of
the 1990s
are serious and include
AIDS and HIV
infection.

Finding solutions requires
comprehensive programs
that work closely
with other agencies
as well as
families.

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THE COUNCIL OF CHIEF STATE SCHOOL OFFICERS

The Council of Chief State School Officers (CCSSO) is the nationwide non-profit organization of the 57 public officials who head departments of public education in every state, the District of Columbia, the Department of Defense Dependents Schools, and five extra-state jurisdictions.

CCSSO provides leadership on major educational issues by seeking members' consensus and expressing their views to civic and professional organizations, federal agencies, the Congress, and the public.

Because CCSSO represents each state's chief education administrator, it has access to the educational and governmental establishment in each state. By participating in coalitions with other organizations, CCSSO members act cooperatively on vital educational matters.

The CCSSO Resource Center on Educational Equity provides services to achieve equity in education for minorities and women and girls, as well as disabled, limited-English-proficient, and low-income students. The Center staffs a variety of CCSSO leadership initiatives to provide better educational services to children and youth at risk to school success.

Council of Chief State School Officers
Herbert J. Grover (Wisconsin), President
Werner Rogers (Georgia), President-elect
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Resource Center on Educational Equity

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PREFACE

The health of students is a major concern of every chief state school officer. Good health facilitates learning. And the same child who is at risk of school failure is frequently also at risk of poor health. Indeed, health and education are two major determinants of whether a child will grow up to be a self-sufficient and productive member of society.

Many people and institutions (from health and social service agencies to community organizations and parents) play important roles in creating an environment in which children can learn and be healthy. One essential player in any such effort is schools, the public institution that has the greatest day-to-day contact with young people.

Given this concern and this responsibility, the Council of Chief State School Officers began the HIV/AIDS Prevention Education Project in 1987. This project is an integral part of CCSSO's efforts to support chief state school officers and their staff to ensure educational success for all students.

Administered by CCSSO's Resource Center on Educational Equity and funded by a cooperative agreement with the Centers for Disease Control, this project assists chief state school officers and state education agencies by providing programs and fostering collaborative efforts to address today's school health issues, including HIV infection and AIDS.*

Beyond the Health Room is the second of three major publications of this CCSSO project. The first, *How Four States Put HIV/AIDS Instruction in the Classroom* (1990), highlighted how four diverse states—Alabama, Maryland, Nebraska, and Washington—

* The term "HIV/AIDS" (rather than "AIDS") is frequently used in this report to stress that, especially for adolescents, preventing HIV infection is the key to taking control of the epidemic. AIDS (or acquired immunodeficiency syndrome) is the end stage of infection with a virus called HIV (or human immunodeficiency virus). HIV damages the immune system and eventually cripples the body's ability to fight disease. People infected with HIV are diagnosed as having AIDS if they develop certain serious conditions, including Kaposi's sarcoma (a rare form of cancer), *Pneumocystis carinii* pneumonia, or HIV dementia.

succeeded in providing HIV/AIDS instruction in elementary and secondary classrooms.

Later this year, a third publication, *Lessons from the Classroom*, will describe success factors in teaching young people about HIV infection and AIDS in the school setting. This publication, which draws on 15 site visits by CCSSO teams to local school districts across the country, will include recommendations to chief state school officers and state education agencies.

The CCSSO HIV/AIDS Prevention Education Project plans to continue its work and to share answers to the increasing number of questions that will arise in the years ahead.

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CCSSO staff responsible for this project include Jane Kratovil (Director of the HIV/AIDS Prevention Education Project), Cynthia G. Brown (Director of the Resource Center on Educational Equity), and Gordon M. Ambach (Executive Director of the Council of Chief State School Officers).

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Margaret C. Dunkle and Margaret A. Nash wrote three of the four major chapters—Chapter I ("Putting Health Programs in the School Context"), Chapter III ("Understanding the Characteristics and Components of Comprehensive School Health Programs"), and Chapter IV ("Addressing HIV/AIDS Through School Strategies and Programs"). Chapter II ("Looking at the Health Needs of Children and Youth") was written by Darlene Saunders, Project Associate with the CCSSO Resource Center on Educational Equity. Chapter IV is based on research conducted by Ilene Bergsmann, consultant to the CCSSO.

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Margaret C. Dunkle and Margaret A. Nash edited and revised the entire publication. Margaret Dunkle is currently Director of the American Association of University Women Educational Foundation.

We know that sound health education leads to good health.
We know that good health leads to success in school.
The challenge is to assure
the health and education systems
support one another to serve all students.

Gordon M. Ambach
Council of Chief State School Officers, 1990

INTRODUCTION

Many people think of a school health program as a health room, a few hours of instruction on health issues, and a part-time nurse who dispenses aspirin and Band-Aids. While this image was probably never accurate, it is abundantly clear that the health needs of students of the 1990s go far beyond the health room.

Because good health and good learning go hand-in-hand, school health issues today are being discussed in the context of school reform. As dominant players in this movement, state education agencies—headed by chief state school officers—are increasingly becoming full partners in meeting the health as well as educational needs of young people.

Beyond the Health Room provides a solid base for discussing the role of schools in improving the health of children and youth. Written for chief state school officers and their health staff, the four chapters provide a broad framework for addressing the health concerns of young people. They provide essential information about school health programs, the health status of young people in this country, human immunodeficiency virus (HIV), and acquired immunodeficiency syndrome (AIDS).

Chapter I examines the relationship between health and learning and outlines the health needs of children and youth as well as the role of schools in meeting these needs.

Chapter II documents the health needs of this country's young people, especially racial and ethnic minority and low-income children and youth.

Chapter III takes a closer look at the three building blocks of a comprehensive school health program (instruction, environment, and services) and shows how each plays an important role in assuring that young people are effective learners and equipped to become effective adults.

Because of the immediate need for school systems to do their part to prevent HIV infection among children and youth, Chapter IV describes programs and strategies that schools and communities are using to address this life-threatening disease.

The following pages raise and answer many questions. At the same time, because issues emerge more quickly than answers, there is still much to be learned.

Nonetheless, state education agencies can be catalysts to help communities make the critical link between health and education—and move beyond the confines of the health room to discuss the role of schools in meeting the health needs of young people.

Good health does not guarantee that students will be interested in learning, but . . . its absence lowers students' academic performance.

Carnegie Council on Adolescent Development, 1989

I

PUTTING HEALTH PROGRAMS IN THE SCHOOL CONTEXT

Building effective school health programs requires understanding the connections between health and learning, as well as the health concerns of children and youth. This chapter examines these issues, outlines the characteristics of a comprehensive school health program, and examines the role of schools in meeting the health needs of young people.

WHAT ARE THE BUILDING BLOCKS OF A COMPREHENSIVE SCHOOL HEALTH PROGRAM?*

A comprehensive school health program provides health instruction and health services in a healthy school environment. To be fully effective, these three basic components—instruction, services, and environment—must be coordinated so that efforts in one area reinforce those in other areas.

* The commonly used term, "comprehensive health education," is not used in this publication because of confusion about the word "education." To some people, "education" connotes instruction only; to others, it means the whole health program.

Health *instruction* can include growth and development, nutrition, infectious and chronic diseases, health promotion, and substance abuse. School health *services* can include vision, hearing, and other screening for health problems; food services; counseling; a fitness room or program; a nurse or aide; referrals to community health services; or a school-based health clinic. A healthy school *environment* involves a safe structure and location, buildings free from asbestos, tobacco smoke, and other hazardous substances, and a supportive learning environment. Chapter III describes each component of a comprehensive program in detail.

WHAT IS THE RELATIONSHIP BETWEEN HEALTH & LEARNING?

A healthy child is a teachable child. A student who is hungry, in physical or emotional pain, or impaired by drugs or alcohol cannot benefit fully from schooling. A child or adolescent who is frequently sick is also one who is repeatedly absent, setting the stage for poor school performance and school dropout. In the larger context, schools are society's vehicle for providing young people with the tools for successful adulthood. Perhaps no tool is more essential than good health.

The following examples illustrate the close relationship between health and learning.

- Most instruction in schools relies on sight and sound. Students with untreated vision and hearing problems may perform poorly because they cannot read the blackboard or hear the teacher.

- Malnourished children are less physically active, less attentive, and less curious than those who are well nourished. Even mild iron deficiency anemia, a common problem among children, can lead to shortened attention spans, irritability, fatigue, and decreased ability to concentrate. These children may perform poorly on tests of

vocabulary, reading, mathematics, problem solving, and motor skills. (National Education Association, 1989)

- More than 40 percent of all girls who drop out of school give pregnancy or marriage as their reason. (Peng, 1983) Teenage mothers are at great risk of having low-birthweight babies with disabilities that will require special education services when they enter school. (Children's Defense Fund, 1985)

- Child abuse, child neglect, or family problems (such as divorce or violent parental arguments) can sabotage learning. Children from these situations may be overly aggressive and disruptive or, at the other extreme, withdrawn and depressed. (U.S. Department of Health and Human Services, 1984; Kolbe, 1985)

- Abuse of tobacco, alcohol, and drugs can stifle creativity, thwart imagination, and suppress ambition. High school seniors who use drugs are more than three times as likely to skip school than those who do not use drugs. (U.S. Department of Education, 1987) Use of alcohol is linked to unintentional injuries (such as burns, falls, or motor vehicle accidents) as well as poor judgement. Even a few drinks deprive cells of needed oxygen. (National Institute on Drug Abuse, 1980)

- Children and youth who get regular exercise have better concentration—and consequently better mathematical, reading, and writing scores—than those who do not exercise regularly. Physical activity also reduces disruptive classroom behavior and susceptibility to stress. (Kolbe, 1985)

Those in the school system who are closest to students—that is, teachers—recognize the degree to which health and education are intertwined. In a nationwide study of teachers,

more than two-thirds reported poor health among students as a problem in their school. Two-thirds reported malnourishment, and 90 percent reported child abuse and neglect as problems. (Carnegie Foundation for the Advancement of Teaching, 1988)

This relationship is clearest in our youngest children. As 1988 CCSSO president Verne A. Duncan said in *A Guide for State Action* on early childhood education:

> Our concern is children—their health and nutrition, well-being, care, safety, housing, and when these needs are met, their education.

WHAT IS THE HEALTH STATUS OF CHILDREN & YOUTH?

Too many of our country's children and youth are at risk from a health as well as an educational standpoint.

The statistics paint a bleak picture of the health of America's children and youth:

- Hundreds of adolescents have been diagnosed with AIDS; thousands more are infected with HIV and will face AIDS when they are in their twenties. (Centers for Disease Control, 1990)

- Nearly half of 16- and 17-year-olds report drinking alcohol during the past month, as do more than a third of 14- and 15-year-olds. (U.S. Department of Health and Human Services, 1988)

- Suicide is a leading cause of death for young people aged 15-24, second only to accidents. (Miller et al., 1989)

- Only 40 percent of students aged 11-17 regularly participate in year-round appropriate physical activity, even though inadequate exercise as a child sets the stage for adult heart disease.

obesity, and other health problems. (Ross and Gilbert, 1985)

These statistics—and those outlined in more detail in Chapter II—document a pattern of poor health among children and youth that is tragic for the individual and expensive for our nation. Undetected and untreated, minor childhood problems frequently become serious and costly.

As with adults, many of the health problems of young people are related to life style. Consequently, many of these problems can be avoided when people have adequate health knowledge—and the motivation and confidence needed to translate knowledge into healthy behavior. Schools are in a prime position to provide this catalyst for healthy behavior.

WHAT ARE THE SPECIAL HEALTH NEEDS OF AT-RISK CHILDREN & YOUTH?

Often, children who are at risk of school failure are also at risk of poor health. These at-risk young people disproportionately include racial and linguistic minorities, the poor, and the disabled.

Low-income adolescents are much more likely than their higher income counterparts to be in poor health. In a nationwide survey of adolescents aged 10-18, 41 percent of those from families with incomes below the poverty line were in only "good" or "fair or poor" health (as opposed to "excellent" or "very good" health). For those above the poverty line, only 19 percent fell into the bottom two categories. (Newacheck, 1990)

Many of these low-income adolescents have untreated health problems and live in dangerous environments. Too few have reliable information about health and many have no health insurance.

These same young people typically have had the least success with the health care delivery system. They often receive only crisis-oriented, inconsistent, and impersonal health care. Health-care providers from different cultural and socioeconomic backgrounds may neither understand nor respect the health

practices and cultural values of low-income, minority, or limited-English-proficient children and their families.

To be successful, health promotion efforts must reflect the cultural and ethnic diversity of the student population. And those who provide services must work closely with communities to overcome the barriers to good health care that these differences can impose.

Most young people at educational risk also exhibit risky health behaviors. Low academic achievement, school misbehavior, and school dropout often go hand-in-hand with early sexual activity and childbearing, early smoking and alcohol use, heavy drug use, and delinquency. In analyzing studies of problem behaviors among youth, researcher Joy Dryfoos describes a spiral that starts with early school failure, escalates into minor delinquent offenses, and culminates in heavy substance abuse, serious delinquency, early childbearing, and school dropout. (Dryfoos, 1987)

Some students who are at risk of dropping out of school also abuse alcohol and other drugs. The most effective approaches for these students are those most relevant to their lives. Each community should devise drug abuse prevention plans based on the drugs used most commonly in their locality—whether it is beer, chewing tobacco, or "crack" cocaine.

Girls who are (or may become) pregnant, as well as those who are already teenage mothers, are a large at-risk group of students. These students need good prenatal care and clear information about a range of issues, including nutrition, childbirth, well-baby care, parenting skills, family planning, and the damage that drug use can cause to their developing fetus. They also need a supportive environment that encourages them to stay in school.

HIV infection poses a new and life-threatening risk to adolescents. One-fifth (31,000) of people with AIDS are in their twenties. (Centers for Disease Control, 1990) The AIDS

incubation period of ten years or more means that many if not most of these people became infected with HIV as teenagers. Many of the young people who are at risk of HIV infection because of intravenous drug use or unprotected heterosexual or homosexual intercourse are also at risk of school failure.

HIV infection and AIDS—as well as other sexually transmitted diseases—are increasing rapidly and, consequently, must be addressed as part of a school health program. Also, women who have a STD (such as genital warts) may be more likely to become infected with HIV during heterosexual intercourse. (Quinn et al., 1988)

Heterosexual transmission of HIV infection is increasing, a fact that has especially serious implications for young girls who have sexual intercourse with (generally older) HIV-infected males.

Among teenagers, the HIV infection rate for girls is consistently higher—sometimes several times higher—than the rate for boys. This is exactly opposite of the pattern in older populations. (For example, overall, the male AIDS rate is almost nine times that of females.) While the largest difference was found in a Washington, DC study—where the HIV infection rate was 4.7 per 1,000 for teenage girls, compared to 1.7 per 1,000 for boys—other studies of teenagers have documented the same pattern (D'Angelo, 1989; Quinn et al., 1988; Burke et al., 1990)

This high susceptibility of teenage girls to HIV infection has direct implications for HIV/AIDS prevention education programs in schools and communities. Girls need to understand that they can contract the HIV virus through heterosexual intercourse. And girls (and their male partners) need to know that a female infected with HIV may pass the infection on to her child during pregnancy or childbirth.

HOW WELL IS OUR COUNTRY MEETING THESE NEEDS?

Not very well. In a 1988 survey of 52 cities, almost all mayors (88 percent) reported that the health and mental health care needs of low-income children were increasing, and 94 percent reported that substance abuse problems for all children were on the rise. (U.S. Conference of Mayors, 1988) Although recent studies show a decline in drug use among *high school seniors*, these figures exclude the many who drop out of school and never enter the 12th grade.

An increasing number of children are uninsured—with the result that they do not get needed health care until they are in crisis, if at all. More than 30 percent of poor children have no health insurance coverage, compared to nine percent of children from families with incomes above the poverty line. (Newacheck and McManus, 1990) In low-income urban areas, where most school-based health clinics are located, the rates are even worse. More than half of students using these clinics have no other source of primary health care, and a third have no health insurance. (Center for Population Options, 1989)

WHAT IS THE ROLE OF SCHOOLS IN MEETING THE HEALTH NEEDS OF CHILDREN & YOUTH?

Schools can provide the ounce of prevention today that makes a pound of cure unnecessary tomorrow. Schools have access to young people that is unrivaled by any other institution. School is the only source of accurate health information and the only stable environment that many children and youth know.

Ready access to young people means that school staff may be the first to identify emerging health problems in a child or adolescent. This access also means that schools can be a catalyst for coordinating the often bewildering array of fragmented services and programs in a community.

Nationwide, concern is growing about the health of children, and support is increasing for expanding the school role in health. For example, a study in North and South Carolina found that almost 80 percent of the 1,000 adults surveyed favored the establishment of health centers in public schools. (Carnegie Council on Adolescent Development, 1988)

Any new demand for educational time and resources faces stiff competition. The case for schools to address the health needs of young people is increasingly compelling because of the relationship of health to learning, the poor health status of many children and adolescents, and the threat of HIV infection and AIDS.

ARE SCHOOLS ALREADY OFFERING COMPREHENSIVE HEALTH PROGRAMS?

Yes and no. In some way, every school system already addresses the three basics (instruction, services, and environment). In most schools, each element—the cafeteria, physical education, a health education class, the school nurse, concern about asbestos or lead paint—is seen as separate and distinct, instead of as an integral part of a unified health program.

A comprehensive health program often means expanding what already exists, and it always means integrating separate pieces into a coordinated whole. Expansion of services may mean having a nurse in the building for more hours each week. Integration of services may mean forming school health teams that include a wide range of school staff—from teachers to food service workers and counselors.

Currently, the extent and content of school health programs vary widely. For example, 32 states require that each student receive health education instruction before graduation. Eighteen states require a physical examination for entry into kindergarten. Twenty-five states require physical examinations for school employees at some time. Nine states require that school districts have a school health advisory council that includes community representatives. Eight states specify a ratio for a maximum number of students per school

nurse. For entry into kindergarten, 50 states mandate DPT, measles and rubella immunizations, and 49 states mandate polio immunization. (Lovato et al., 1989)

* * * * * * *

Given the relationship between health and learning, addressing any single issue in isolation is rarely enough. Effective school strategies need to look beyond academics to the often unmet and interrelated health needs that limit school performance. The following chapter outlines the health status of children and youth.

Education, then,
beyond all other devices of human origin,
is a great equalizer . . .
—the balance wheel of social machinery.

Horace Mann, 1948

II

LOOKING AT THE HEALTH NEEDS OF CHILDREN & YOUTH

Children and youth today have different health concerns than their counterparts of a hundred years ago, when the average life span was much shorter and before routine immunizations reduced the threat of such diseases as smallpox, diphtheria, and polio.

An estimated 20 percent of all children aged 3-17 (10.2 million children) have one or more developmental, learning, or emotional disorders. While this figure is daunting, it *underestimates* these problems for black and Hispanic children, whose parents are far less likely to report problems than parents of white children. (Zill and Schoenborn, 1990)

This chapter looks at seven health areas and describes the overall health status of adolescents as well as special concerns of low-income, and racial and ethnic minority children and youth. These areas are adolescent sexuality, alcohol and other substance abuse, chronic and infectious disease, nutrition and lead poisoning, child abuse and neglect, violence and injuries, and suicides.

ADOLESCENT SEXUALITY

Adolescent sexuality includes three of the most controversial and important adolescent health issues of our day—HIV infection and AIDS, sexually transmitted diseases, and teenage pregnancy.

HIV INFECTION & AIDS

HIV infection and AIDS are major health concerns for adolescents. While less than one percent of all diagnosed AIDS cases are teenagers, the numbers are increasing. (Centers for Disease Control, 1990b)

The relatively low numbers of *diagnosed* AIDS cases mask the number of adolescents who are infected with HIV, the virus that causes AIDS. Because the average time between infection with HIV and diagnosis with AIDS is ten years, adolescents infected with HIV are typically not diagnosed as having AIDS until they are well into their twenties. Twenty percent of all reported AIDS cases are in people aged 20-29. (Centers for Disease Control, 1990b) AIDS is projected to surpass automobile accidents as the leading cause of death for adults aged 20 to 49 by 1992. (Centers for Disease Control, 1990a)

HIV infection and AIDS pose a special threat to minority children and youth. Black children constitute 15 percent of the nation's children, yet they account for 50 percent of all childhood AIDS cases (that is, all AIDS cases in people under age twenty). Hispanic children constitute 10 percent of the nation's children, yet they account for 25 percent of all childhood AIDS cases. (Centers for Disease Control, 1990b; U.S. House of Representatives, 1989)

More than half (52 percent) of all children under age 13 who were diagnosed with AIDS between 1981 and October 1990 have died, and the number of cases among infants and children is rapidly increasing. (Centers for Disease Control, 1990b)

Finally, as noted in the previous chapter, the HIV infection rate for teenage girls is consistently higher than the rate for teenage boys—a pattern that has serious ramifications for the content of HIV/AIDS prevention education programs. (D'Angelo, 1989; Quinn et al., 1988; Burke et al., 1990)

SEXUALLY TRANSMITTED DISEASES

Almost two-thirds (63 percent) of all cases of sexually transmitted diseases are in persons under age 25. Some 2.5 million teens contract a sexually transmitted disease each year. (Centers for Disease Control, 1989)

TEENAGE PREGNANCY

More than half (57 percent) of U.S. teenagers report having sexual intercourse by age seventeen. (Harris, 1986) About half of the one million teens who become pregnant each year give birth. Only about half of teenage mothers graduate from high school, and more than 25 percent of teenage mothers become pregnant again within two years. (Children's Defense Fund, 1987; National Center for Health Statistics, 1988)

The teenage birth rate is higher for blacks than whites. In 1986, for young women aged 10-14, the birth rate for blacks was 4.6 per 1,000, compared to a birth rate of 0.6 per 1,000 for whites. Among older teenagers (15-17 years old), the black birth rate was 70.0 per 1,000, three times the white birth rate of 23.4 per 1,000. (National Center for Health Statistics, 1988)

ALCOHOL, TOBACCO, & OTHER SUBSTANCE ABUSE

Use and abuse of alcohol, tobacco, and other drugs cause many health problems and exacerbate others—from unintentional injuries, suicides, and homicides, to cancer and cirrhosis of the liver. Also, both boys and girls with drug addictions may trade sex for drugs, a practice that places them at high risk for sexually transmitted diseases, including HIV infection.

Many substance abuse problems develop well before high school. For example, 56 percent of 1988 high school seniors reported that they first used alcohol before tenth grade, and 11 percent reported smoking cigarettes daily before grade ten.

More than half of these seniors (54 percent) reported that they had, at some point in their lives, used some illicit drug (such as cocaine, heroin, or opiates) or stimulants, tranquilizers, or sedatives not under a doctor's orders. Although 40 percent of those who had used illicit drugs had used only marijuana, more than a third had used other illicit drugs.

Nearly all (92 percent) of these high school seniors reported having tried alcohol, and two-thirds (66 percent) reported having used alcohol within the past month.

Two-thirds (66 percent) of the 1988 seniors reported having ever smoked a cigarette, and almost three in ten (29 percent) reported smoking within the past month. Further, despite widely documented health risks, cigarette smoking is increasing among adolescent girls. (U.S. Department of Health and Human Services, 1989) Additionally, Hispanic adolescents, both male and female, have higher self-reported rates of cigarette smoking than either their black or white counterparts. (Damberg, 1986)

CHRONIC & INFECTIOUS DISEASE

Of the 62 million American children under age eighteen, an estimated 7.5 million (12 percent) have a chronic disease. A million and a half children have asthma, congenital heart disease, diabetes mellitus, cleft lip and palate, spina bifida, sickle cell anemia, chronic renal failure, or muscular dystrophy. (Hobbs et al., 1985) Asthma, the most frequent of these illnesses, occurs at a higher rate among black than white children: 9.4 percent of black children vs. 6.2 percent of white children have

asthma. (National Association of Children's Hospitals, 1989)

Although many diseases are preventable through immunization, inadequate immunizations accounted for 60 percent of all reported cases of such diseases as mumps and measles in 1986. (Miller et al., 1989) Immunization levels are lowest for minority children. Overall, the proportion of young children (aged one to four) who are not fully immunized is eleven to sixteen percentage points higher among nonwhites than whites. (Hobbs et al., 1985)

NUTRITION & LEAD POISONING

Adequate nutrition is essential for normal development in childhood and adolescence. While many children have poor eating habits and weight problems, low-income children have the least nutritionally adequate diets. (National Education Association, 1989) They are also the least likely to understand the connection between eating too much high-sugar and high-fat food and having health problems. (Metropolitan Life Foundation, 1989)

Eating disorders are becoming increasingly common among adolescents. The two most common disorders are anorexia nervosa (a syndrome of extreme weight loss and intense fear of becoming obese) and bulimia (a syndrome of binge eating followed by self-induced vomiting, fasting, or use of diuretics or laxatives). In a national poll, twelve percent of teenage girls and four percent of boys reported symptoms of either anorexia or bulimia. While these have typically been viewed as conditions that affect upper-income white females, there is mounting evidence that many males, minority group members, and low-income young people suffer from these disorders as well. (U.S. House of Representatives, 1988)

Lead poisoning from eating chips of lead-based paint is related to nutritional deficits. Approximately one child in six in the United States has dangerously elevated blood lead levels. The rate is highest among black children who live in poverty: more than half of these children have too-high lead levels in their blood. Further, 400,000 babies are born each year with toxic levels of lead in their blood.

Elevated lead levels are predictors of poor school performance. Children with elevated lead levels at ages 6 to 7 are seven times more likely than other children to drop out of school as adolescents—and six times more likely to have a reading disability that persists into their teenage years. (Needleman et al., 1990)

CHILD ABUSE & NEGLECT

Child abuse and neglect are common phenomena in the United States: an estimated 1.9 million children are reported neglected or abused each year.

This number rose by 55 percent between 1981 and 1985. And, in the year between 1984 and 1985, child abuse reports increased by nearly nine percent. (U.S. House of Representatives, 1987) In 1986, physical abuse was reported most frequently (5.7 per 1,000 children), followed by emotional abuse (3.4 per 1,000 children) and sexual abuse (2.5 per 1,000 children). (U.S. Department of Health and Human Services, 1988)

There is a strong relationship between family income and reported maltreatment. Children from low-income families (with incomes under $15,000) are five times more likely to be reported as maltreated than those from higher-income families (with incomes greater than $15,000). (U.S. Department of Health and Human Services, 1988) Of children reported to have been maltreated in 1985, 62 percent were white, 20 percent were black, 15 percent were Hispanic, and 3 percent were

"other." (American Humane Association, 1986) These figures are troubling and may well reflect *under* reporting of abuse and neglect in families with higher incomes and in white families.

VIOLENCE & INJURIES

Violence is all too common among adolescents. In a study of eighth and tenth graders, half of the boys (49 percent) and more than a quarter of the girls (28 percent) reported having been in at least one physical fight during the past year. A third (34 percent) report that someone threatened to hurt them, 14 percent report having been robbed, and 13 percent report having been attacked while at school.

Further, many boys and girls said that they had access to weapons. Nearly a quarter (23 percent) of the boys reported carrying a knife to school at least once during the past year. And 2.6 percent of the boys reported carrying a handgun to school at least once during the previous year. The figures were much lower for girls: 5 percent reported carrying a knife to school, and fewer than one percent reported carrying a gun to school during the past year. (American School Health Association et al., 1989)

Homicide is a major killer of young black men. Blacks constituted 35 percent of U.S. homicide deaths, but only 12 percent of the population, in 1986. (McBride, 1988) The rate is especially high for black men aged 20-24, who have a homicide rate roughly double that of younger black men aged 15-19 (113 per 100,000, compared to 60 per 100,000). (U.S. Department of Health and Human Services, 1990)

Motor vehicle crashes or collisions account for more than seventy percent of all accidental deaths of young people aged 15-25. Well over half (56 percent) of adolescents do not wear car seatbelts, and 32 percent report having ridden in a car when the driver had been

drinking. (American School Health Association et al., 1989)

SUICIDES

Many children experience mental or emotional disorders—from mild and transitory to severe and disabling—at some time during their school years.

Suicide is the second leading cause of death for U.S. youth aged 15-24, and the adolescent suicide rate has tripled over the past thirty years. (Miller et al., 1989) A third of adolescents report that they have "seriously thought" about committing suicide, and 14 percent report "actually trying" to commit suicide. (American School Health Association et al., 1989)

More males than females commit suicide (by a ratio of almost five to one), even though more females attempt suicide. Suicide rates are also higher for whites than blacks. In 1984-1985, white males had the highest rate (22.7 per 100,000), almost double that of black males (13.3 per 100,000), and much higher than either white females (4.7 per 100,000) or black females (2.0 per 100,000). (U.S. Department of Health and Human Services, 1987)

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Understanding the health concerns of children and youth is essential to developing effective and appropriate school health programs. Chapter III describes the features of comprehensive school health programs and underscores the need for these programs to complement and work with other community agencies and services.

School systems are not responsible
for meeting every need of their students.
But where the need directly affects learning,
the school must meet the challenge.
So it is with health.

Carnegie Council on Adolescent Development, 1989

III

UNDERSTANDING THE CHARACTERISTICS & COMPONENTS OF COMPREHENSIVE SCHOOL HEALTH PROGRAMS

Children and youth, especially those at risk, have an increasing need for thorough health instruction, accessible and affordable health services, and a school environment that is conducive to learning.

The three basic building blocks of a comprehensive school health program are instruction, health services, and a healthy school environment. To be effective, these components must be coordinated so that they complement and reinforce one another.

This chapter looks at these three vital components of school health programs, the importance of coordinating school programs with other community services, how school health programs can be assessed, and what we know about reaching disadvantaged children and youth.

INSTRUCTION

WHAT IS MEANT BY COMPREHENSIVE HEALTH INSTRUCTION?

Comprehensive health instruction provides students with the basic information they need to make choices about their health.

One of the most important things a comprehensive school health program can do is empower children and youth to be responsible for their own health wherever possible. For many Americans, school is the only place where they get the information they need to make good health decisions. Those who do not learn important health lessons in school may never learn them.

Most schools offer some health instruction, although it is often minimal. Many school systems teach health at only one grade level. In fact, 22 percent—or about eight million public school students—receive either no health instruction or instruction during only one academic year. (Metropolitan Life Foundation, 1988)

WHAT TOPICS SHOULD BE COVERED?

Comprehensive health instruction typically covers the following topics:

- Preventing unintentional injuries
- Safety, including first aid
- Health care resources—knowing what is available and how to be a good consumer of health services
- Environmental health
- Family life education, including information about family dynamics, building relationships, child abuse, choices about relationships, family planning, parenting skills, sex education, sexually transmitted diseases, HIV infection, and AIDS
- Nutrition, including balanced diets, food preparation, reading food labels, and

differences in nutritional needs for pregnant women

- Dental health
- Disease prevention, including heart disease, stroke, diabetes, and cancer
- Tobacco, alcohol, and other substance abuse prevention
- Mental and emotional health, including building self-esteem, coping with stress, and communication skills
- Physical education—fitness and exercise.

HOW EARLY SHOULD HEALTH INSTRUCTION BEGIN?

As soon as a student is enrolled. Instruction in health is appropriate for all grade levels. Instruction should begin in kindergarten or before and continue incrementally through grade twelve.

Even very young children can learn safety measures (how to cross the street or dial 911), nutrition (that fruits and vegetables are good for them, and sugary snacks are not), disease prevention (what germs are), drug abuse prevention (what drinks contain alcohol, what alcohol can do to a person, why smoking is harmful), and many other health lessons.

HOW OFTEN SHOULD HEALTH BE TAUGHT?

The more often health issues are covered, the more effect the instruction has on students. A three-year study of 30,000 4th through 7th graders found both knowledge and, more importantly, positive behaviors increased as students had more health instruction. Fifty or more classroom hours each year—about an hour and a half a week—produced significant attitudinal changes by these students. (Connell et al., 1985)

SHOULD HEALTH BE A SEPARATE COURSE OR INTEGRATED THROUGHOUT?

Both may be needed, depending on content and grade level. Most health experts recommend that health be a separate subject at both the junior and senior high school levels. Also, because knowledge of health provides a vital foundation for making healthy

life choices, they recommend requiring instruction in health for high school graduation.

Health can be integrated into other courses at all grade levels. Health issues can be used to teach writing and research skills, and in biology (growth and development), home economics (nutrition), history (disease control), and social studies (foods and health practices in other lands). Writing and research assignments can address preventive medicine, stress reduction, or disease control.

Health can be taught effectively in short, frequent sessions in the early grades. Effective learning more likely comes from something simple said often, demonstrated in various ways, and made relevant to students' lives, rather than from a long lecture once a year.

HOW SHOULD HEALTH BE TAUGHT?

Health should be taught by example. Conflicting messages, such as being told not to smoke and then seeing a teacher light a cigarette just outside the school door, can negate many hours of classroom instruction. Worse, it erodes trust and credibility.

Health should be taught with an understanding of the importance of peer pressure and should instill confidence in young people so that they are strong enough to resist it. Good curricula that include role plays and practice rejecting temptations to engage in risky behavior can help build this strength.

Most of all, health should be taught in an empowering way. Although some health problems, such as congenital diseases, are beyond our control, students need to see how much control they *do* have. They need to understand the connections between what they eat and how well their minds and bodies function, as well as the relationship between exercise, strength, and stamina. On a larger scale, they must see the cause and effect of their behavior and take responsibility for how they affect others: drunk driving, for instance, puts many lives in jeopardy.

WHO TEACHES HEALTH?

Health lessons are taught by everyone—through example as well as curricula. All school staff—not just teachers—should have the opportunity to attend inservice training so that their daily interactions with students reinforce health lessons taught in the classroom.

At the primary school level, teachers and staff must have training on how to integrate health instruction into all aspects of the school program. Very few elementary school teachers have training in health, and most states do not require teachers to take any courses in health instruction. In fact, elementary certification in health is available in only 11 states. Even in states with certification standards, certified teachers are not always the ones who teach health. (Lohrmann et al., 1987) Clearly, inservice training is much needed at the elementary school level.

At the secondary level, most health courses are taught by staff with little or no formal training in health. (Lohrmann et al., 1987) This must change. Health instruction in secondary schools should be taught by well-trained health teachers.

SERVICES

WHAT IS MEANT BY COMPREHENSIVE SCHOOL HEALTH SERVICES?

A comprehensive school health program provides students with services—or access to services—they need. For some students, school is the only place where they get basic health information and services. At a minimum, schools can tap into available health resources in the community.

Many people still think of school health services as a health room with a nurse who puts a Band-Aid on a cut. This image is far from reality. First, the health problems of today's students are complex. Second, few schools actually have a nurse on-site. More often, a nurse visits a school for only a few hours each week.

Health services offered in a school setting or coordinated with schools are increasingly important. The growing health needs of children and youth, the rising costs of health care, and the long working hours of many parents make it difficult for children to get needed medical attention. In addition, the mainstreaming of children with disabilities into regular classrooms brings its own set of health issues.

WHAT SERVICES SHOULD SCHOOLS OFFER?

That depends on the needs of students and the degree to which these needs are met elsewhere in the community. All schools should provide routine first aid and care for students with chronic and episodic illnesses, operate vision and hearing screenings, keep up-to-date health assessment and immunization records, and make referrals for further care. (Pine, 1985)

Many schools go beyond this minimum, providing a range of health-related services to promote good health, prevent unhealthy behaviors, and identify possible health problems.

For example, schools can take the lead in promoting good health and wellness, encouraging healthy behaviors, and teaching new skills. This can include operating facilities and services to encourage good nutrition and exercise, providing help with stress reduction, and running staff and student wellness programs.

Schools can also help prevent health problems by raising staff and student awareness of health-related issues and problems by sponsoring such activities as:

- Campaigns to prevent substance abuse
- Sessions on resisting peer pressure
- Prenatal classes
- Sessions on preventing child abuse and neglect

- Sessions on family planning, well-baby care, and "date rape."

Finally, schools can identify health problems that already exist and help students and their families take the first step toward resolving the problems. Identification procedures can include:

- Maintaining immunization records
- Screening for vision, hearing, developmental growth delays, lead poisoning, hypertension, scoliosis, and dental problems.

At a maximum, schools can provide comprehensive health services through school-based health clinics.

ARE SCHOOL-BASED CLINICS FOR EVERYONE?

No. Each community has its own set of needs and resources. The services a school provides should be decided by taking many factors into account: the health needs of students, local demographics, the availability and affordability of health resources in the community, and the extent to which young people actually use existing health services.

School-based health clinics serve a wide range of needs. They provide athletics physicals, screenings, immunizations, general health assessments, birth control and family planning services, and substance abuse programs.

Clinics can be funded by the school system or health department—or they can be extensions of local hospitals or public or private health agencies, where schools provide the space while other agencies cover the cost. In other cases, the clinics are school *linked*, rather than school *based*—that is, located off school grounds but operated in cooperation with the school.

Not every community can benefit from a school-based or school-linked clinic, but many clinics have had great success. At

some clinics, up to 75 percent of the students use clinic services at least once each year. Clinics help prevent unintended pregnancies: many report a 40 to 50 percent drop in the rate of births to teenagers after opening. (Lovick and Wesson, 1986) Clinics report that, on average, over half of the students using them have no other source of primary health care. (Lovick and Stern, 1988)

DO SCHOOLS HAVE TO PROVIDE ALL THESE SERVICES?

No. Many communities already have high-quality, affordable health care resources that meet the needs of children. Schools can take the lead in coordinating health services so that they are easily accessible to school-aged children and their parents. Schools also can encourage children to use community health resources.

Where these resources do not exist in the community, where they are not readily accessible to students, or where it is clear that students are not using them, schools should consider providing needed health services in or near the school building. This may mean building new partnerships with community health care agencies or tapping nontraditional funding sources such as private foundations or state and federal health programs.

DO SCHOOL NURSES ALREADY TAKE CARE OF ALL THIS?

No, almost never. It is a myth that every school has a nurse. Many do not, and others have a visit from a nurse only half a day (or less) each week.

In some school districts, the school nurse is the sole health professional. In others, the nurse works with part-time staff, such as physicians, other nurses, or paraprofessionals. In other cases, the services provided by the school nurse are supplemented with contracted services, such as medical diagnoses, laboratory testing, and social services.

A good nurse-to-student ratio is 1:750, or, in schools with disabled students who are mainstreamed, 1:225, according to the

National Association of School Nurses. (Pine, 1985) In reality, many districts have one nurse for 2,000 to 3,000 students, a ratio that makes providing needed services difficult at best. (Kolbe et al., 1986) For many schools, an increased investment in a well-prepared school nurse would reap substantial health benefits for students and the community alike.

WHAT IS A WELL-PREPARED SCHOOL NURSE?

A well-prepared school nurse has a baccalaureate degree in nursing as well as special training to work in the school setting. (American Academy of Pediatrics, 1987) Most nurses are trained to work in hospitals, not schools, and need additional training to work effectively in the community-school environment. A well-prepared school nurse also is knowledgeable about and sensitive to multicultural issues, whether through formal course work, inservice training, or her or his own experience.

The American Nurses' Association includes a wide range of services in the standards for school nursing, including establishing and maintaining a comprehensive school health program, developing individualized health plans, collaborating with other professionals, promoting optimal wellness through health education, and working with others in the community to assure the broad continuum of health services. (American Nurses' Association, 1983)

ENVIRONMENT

A healthy school environment includes a psychological climate conducive to learning and a safe physical surrounding. Many factors contribute to the overall school environment. These can be thought of in three categories: physical, social, and emotional.

THE PHYSICAL ENVIRONMENT

Most school administrators already work to ensure a safe physical environment for their students and staff. They check that the

structure of the building is sound, health and fire codes are adhered to, and crossing guards are posted on street corners.

Schools can facilitate a healthful physical environment by:

- Following building codes and inspecting lighting and ventilation systems
- Checking for and correcting any problems with asbestos or radon contamination, as well as lead in the school's paint and water
- Having a strong school safety program for buildings and playgrounds
- Having infection-control policies and procedures
- Providing sanitary and nutritional food services.

However, only 33 states mandate annual kitchen and cafeteria inspections. Fewer than a third of the states require inspections of chemical labs, gyms, or playgrounds. Many schools have problems with overcrowding, poor heating and ventilation, and such contaminants as asbestos and lead. (Kolbe et al., 1986)

Food programs contribute to a healthful school environment when the food served is well-balanced and nutritionally sound. Vending machines can offer healthy snacks and beverages, such as fresh fruit and fruit juices.

Many schools have become healthier places by becoming "smoke-free." Some schools offer smoking cessation programs as well as information about the harmful health effects of tobacco use, often in cooperation with a local nonprofit agency or the health department. A social bonus of a smoke-free environment is that teachers and administrators provide excellent role models of nonsmoking adults.

THE SOCIAL ENVIRONMENT

The social environment promotes good health in daily, often subtle, ways. Interactions between students and staff, as well as interactions among staff members, can reinforce lessons taught more formally in class. A healthy social environment nurtures student achievement and encourages physical activity, participation in extracurricular activities, good eating habits, and open communication. It is also free from violence and crime, drugs and drug dealing, and students who carry weapons.

Schools can foster a healthy social environment by actively promoting the school as a center for excellence, having and enforcing strong policies against carrying weapons in school, enforcing drug-free school zones, and sponsoring campaigns to promote school as a "safe space." At a more subtle level, school management that facilitates shared decision making and cooperative learning in the classroom also promotes a healthy social environment.

Programs that focus on staff wellness have been highly successful. Administrators report lower absentee rates, fewer health claims, and higher morale for staff participating in the program. (American Association of School Administrators, 1987) Wellness programs for staff can include stress tests, health screening, help to stop smoking, and exercise classes. Not only do students see teachers "practice what they preach", students also benefit from having fewer burned-out, stressed-out teachers in their classes.

THE EMOTIONAL ENVIRONMENT

Students' learning is dramatically affected by the climate of the school and the expectations of teachers. If teachers expect black and Hispanic students, as well as girls of all racial and ethnic groups, to perform poorly, these students are likely to fulfill these low expectations. And, if teachers believe that minority students are capable and smart, these students are likely to succeed. (Neckerman and Wilson, 1988)

Historically, nonwhite children have faced outright discrimination in schools. Even today, disciplinary action, reprimands, suspensions, and expulsions all occur at much higher rates for minority youth than for white youth. A healthful emotional environment requires policies and programs that foster, not inhibit, high achievement by these young people. (Fine, 1988)

People are increasingly recognizing the harmful effects of another bias, as well. Homophobia—the irrational fear or hatred of homosexuality—is harmful to all students, both straight and lesbian or gay. Boys may try to act tougher than they feel, or they may not develop close friendships with other boys, fearing they will be accused of sexual involvement, as well.

Girls may refuse to take nontraditional courses, such as auto mechanics, for fear of having their sexual orientation questioned. And some teenagers try to prove that they are not homosexual by becoming sexually active—and even parents—at an early age.

A school environment that denies the existence of homosexuality or tolerates verbal or physical abuse of gay and lesbian students sets the stage for these students dropping out of school.

On the other hand, an environment where homosexual teenagers are not stigmatized allows all boys and girls to choose activities—sports, drama, career paths, relationships—that are of interest to them without feeling pressured to fit into sex-role stereotypes.

Because HIV infection and AIDS is strongly linked with homosexuality in many people's minds, the fear of homosexuality makes it even more difficult—but not less important—to discuss HIV infection and AIDS.

Counseling services and referrals (for such things as substance abuse, suicide prevention, depression, and mental health problems) can also promote a healthy emotional environment.

In addition, training school staff to identify the signs of problems can help students get help before their problems become overwhelming.

Finally, students infected with HIV need a supportive emotional environment at school. Consequently, it is important for schools to have clear policies prohibiting discrimination against HIV-infected students.

COORDINATION

Almost all schools offer some sort of health instruction through specific courses and physical education; almost all schools offer some sort of health services, whether counseling, a health room, or a school-based clinic; and almost all schools want to provide a healthy learning environment.

BUILDING A HEALTH TEAM

What is needed is an approach that integrates each of these separate efforts. The many people who contribute to meeting the health needs of students need to communicate on a regular basis. These players include teachers, coaches, nutritionists, food service workers, counselors, psychologists, nurses and aides, clinic staff, child care workers, transportation supervisors, maintenance workers, school secretaries, and anyone else involved in student and staff health.

School health initiatives need a coordinator. One person needs to be responsible for calling regular meetings and coordinating all aspects of the school's health programs so that each person knows what his or her teammates are doing.

Members of the health team also need training in order to support their teammates and reinforce healthy behavior.

The coordinator and the health team have a lot of work to do, both inside and outside of the school. James O. Mason, former Director of the Centers for Disease Control, recommended that school partnerships include five groups:

public health agencies, the private sector, college and university faculty, parents, and state professional and volunteer agencies. (Mason, 1989) One of the first tasks of the health team is to set up a workable health record-keeping system that both provides necessary information and respects confidentiality requirements.

Finally, each school or district needs a person or team to reach out to the community—to increase awareness of health issues, to promote healthier citizens, to involve parents, and to gain access to professionals who can contribute to the school's health program.

REINFORCING HEALTH LESSONS

Every time a young person has an interaction with a health care provider, there is an opportunity for a learning experience. One clinic in Madison, Wisconsin, recognizes this opportunity and works to combine information with services to empower students to take charge of their own health. After a child is treated for an injury, the health care worker asks, "How will you keep this from happening again?" or, "How will you keep this from getting infected?"

WHAT IS THE RELATIONSHIP BETWEEN SCHOOL HEALTH PROGRAMS & OTHER COMMUNITY SERVICES?

Good health for children and youth concerns every facet of a community, not just educators. Meeting the interrelated health and educational needs of young people involves forging effective partnerships with health care providers, social service and other agencies, as well as religious and community groups. Indeed, putting a comprehensive school health program in place is a long-term solution to problems that have already reached crisis proportions in many communities.

Support for school health programs is strong when community members—from policymakers to parents—understand the

health problems of children, the consequences of these problems for society as well as individuals, and the degree to which other interventions have failed.

Comprehensive school health programs can help assure good health for children. As such, every community member has a stake in making these programs work. In the long run, taxpayers benefit when health care costs drop. Employers benefit when employees do not have to leave work to care for sick children. When these students join the work force, they are healthier and more productive workers with lower absenteeism and fewer health care expenses.

Research supports the concept that good school health programs make good economic sense for communities. A study by the Robert Wood Johnson Foundation found that a well-prepared school nurse could handle more than 95 percent of the problems brought to doctors. (Wisconsin Department of Public Instruction, 1986)

How Can School Health Programs Be Funded?

The long-term key to funding is broad support for the concept that comprehensive school health programs are a necessary investment in the future. If policymakers believe this, then funding will be found, whether by increasing the education budget or from nontraditional sources.

Innovative and collaborative approaches to funding programs for children and youth—especially those at risk of school failure—are springing up across the country. School-based clinics illustrate the range of potential funding sources for school health programs. Most of the funding for these clinics comes from nontraditional sources, such as private foundations, and state and federal health and human service budgets.

In many places, in-school health staff and services are funded in whole or in part by state or local health departments. Some health departments assign nurses to particular school

districts or buildings. (Center for Population Options, 1989)

Businesses across the country also make financial contributions to the health and education of children. One example of a community partnership program is the Houston (Texas) Health Adventure, which sends a healthmobile around to elementary schools. This project was sponsored by the Houston Academy of Medicine, Shell Oil, and the Harris County Medical Society. (American Association of School Administrators, 1987)

National and local foundations fund health programs, including those that are school-based. More than 40 percent of funding for school-based health clinics comes from private foundations. (Center for Population Options, 1989). As concern about HIV infection grows, good arguments can be made to these funders to support instruction as well as services. Although foundation funding can provide an important catalyst, the long-term viability of a program depends on securing more stable funding sources, such as public funding through education or health programs, and insurance and Medicaid reimbursements.

The federal government also funds health programs. The Centers for Disease Control promotes a comprehensive health program approach to addressing HIV infection and AIDS. Expanded school health services have been funded by federal Maternal and Child Health Block Grants, EPSDT (Early and Periodic Screening, Diagnosis, and Treatment Program), Social Services Block Grants, Community Health Centers, Family Planning, Medicaid, Adolescent Family Life Act, and National Health Services Corps.

As comprehensive school health programs become more commonplace, alternative and nontraditional funding schemes are certain to emerge. Many school health programs already receive some of their income from fee-for-service or insurance reimbursements. Health policy researchers have suggested new

options, such as using school systems to provide group health insurance to children, with the cost being shared by employers, families, and public funding sources. (Freedman et al., 1988) We can expect to see communities exploring these and other alternative sources of funding for child health in the years ahead.

Finally, a comprehensive health program can produce cost savings that offset new expenditures. The Dallas public schools estimate that they saved more than $150,000 in substitute teacher pay alone during the year they instituted a staff wellness program. (Blair et al., 1987)

HOW CAN WE ASSESS SCHOOL HEALTH PROGRAMS?

As more and more communities upgrade their school health programs, the demand for solid evaluations of the effectiveness of these programs will increase. This section discusses how success can be measured, what we know about the effectiveness of comprehensive school health programs, and strategies for reaching disadvantaged youth.

How Can Success Be Measured?

Evaluating a three-pronged comprehensive health program is important and difficult and includes measuring the process of implementing programs as well as program outcomes.

At the state level, process goals might include developing a statewide policy statement, requiring certification for teachers of health courses, adding a health course to high school graduation requirements, requiring or recommending that schools be smoke-free, or providing incentives for schools to offer only healthy foods in vending machines.

Comprehensive school health programs have two primary outcome objectives: to increase knowledge and to help students practice healthful behavior. To measure the first—increased knowledge—some states are

considering including health questions in their statewide testing programs. This will not only measure health knowledge; it will also send a message to students and educators that health is an important subject.

Measuring the extent to which comprehensive school health programs foster healthy behavior is more complicated than measuring knowledge. Short-term results of comprehensive health programs can be measured by such things as changes in the number of children being diagnosed and treated for vision or hearing problems, decreases in teen pregnancies as well as low-birthweight babies born to teens, and decreases in student absence due to illness.

Other long-term results are affected by many factors, of which a comprehensive school health program is only one. For example, a strong anti-drug program beginning in kindergarten is not likely to show results until those children reach the seventh or eighth grade, when they are making decisions about smoking, drinking, and using other drugs. Longitudinal studies are necessary to document long-term behavioral change.

What Do We Know About the Effectiveness of School Health Programs?

We have evidence of effectiveness in the area of health instruction. Good health education courses are very effective in increasing knowledge and have been shown to influence attitudes and behavior as well.

A study of 4,800 students in seven states evaluated the *Teenage Health Teaching Modules* (a comprehensive health curriculum). This evaluation found, for example, that students in THTM classes increased their knowledge of health issues significantly more than other students. The health attitudes of students exposed to THTM did not change significantly during the study, *but the health attitudes of other students systematically deteriorated.* THTM also affected the health practices of many students—senior high school students (but not junior high/middle school students) who had been exposed to THTM

reported a reduction in drug use and cigarette smoking. (Nelson et al., 1991; Errecart et al., 1991)

We also know that the more often health is taught, the more likely it is that students will change their health practices. Students with three years of health instruction were less likely to drink alcohol, take drugs, or ride with a drunk driver than their peers who had only one year of health instruction, a 1988 study found. (Metropolitan Life Foundation, 1988)

Proof of the effectiveness of comprehensive programs is rare, partly because comprehensive three-pronged programs are scarce, and partly because of the difficulty of documenting cause and effect in complex human behaviors. But research suggests that health courses alone—the historical mainstay of school health efforts—are not sufficient to improve the health of young people or change their behavior. To be effective, instruction must be coupled with services and integrated into the whole environment of a young person.

This comprehensive approach is illustrated by a program in South Carolina that sharply reduced adolescent pregnancy. This program included formal school instruction to increase knowledge and decision-making skills, as well as intensive community outreach to help parents and other community members improve their skills as parents and role models for youth. Although pregnancy rates declined significantly in the target area, they increased or stayed the same in the four control areas. (Vincent et al., 1987)

WHAT DO WE KNOW ABOUT REACHING DISADVANTAGED CHILDREN & YOUTH?

Today, we know a lot about intervention programs that successfully reach disadvantaged children and families. Most of all, they are intensive, comprehensive, and flexible. In *Within Our Reach*, Lisbeth Schorr outlines the

lessons of programs that work to break the cycle of disadvantage. Successful programs:

- Offer a broad spectrum of services, regularly crossing traditional bureaucratic lines to address the multiple needs of individual human beings;

- See the child in the context of family and the family in the context of its community;

- Hire skilled, competent staff who respect children and their parents and recognize that parents may need help themselves before they can make good use of services for their children;

- Respond to the individual needs of those they serve, even when those needs are outside of their program area, as they often are; and

- Reduce the barriers (of time, money, multiple referrals, scheduling, fragmentation, and isolation) that make heavy demands on people who may already be overwhelmed and underprepared, with the aim of making services coherent, easy to use, and reflecting a sense of continuity.

One of the reasons there are not more effective programs to reach disadvantaged youth is that these characteristics are difficult to achieve in a world where funding is typically categorical and turf issues are a fact of life. Also, although effective solutions are long-term, elected officials and policymakers are often consumed by immediate problems. Indeed, it takes a leader of vision to initiate a program that will not bear fruit until long after he or she has moved on.

At the same time, Schorr's traits of effective programs also distinguish successful schools. And these lessons make a good case for

comprehensive—rather than piecemeal—school health programs.

* * * * * * *

Good health is a prerequisite to a good education. Effective education complements and supports the health and social services needed to overcome the conditions that put a young person at educational risk.

Schools are in a prime position to help ensure that children and youth get the healthiest start possible and have the tools they need to be healthy adults. Chapter IV outlines programs and strategies that schools are using to address HIV infection and AIDS, both as comprehensive programs and separate efforts.

Clearly no knowledge is more critical than knowledge about health. Without it no other goal can be successfully achieved.

Ernest Boyer, 1983

IV

ADDRESSING HIV/AIDS THROUGH SCHOOL STRATEGIES & PROGRAMS

While the previous chapters have discussed school health programs in general, this chapter focuses on specific programs and strategies that schools and communities are using to address HIV infection and AIDS. Sometimes these efforts are in the context of a comprehensive school health program. More often, they are targeted responses to community concerns about HIV infection—responses that may also provide the catalyst to help schools reassess their role in meeting other health needs of young people as well.

Whatever the context, the rising rate of HIV infection in adolescents and the life-threatening nature of AIDS make it imperative for schools to offer effective instruction on HIV infection and AIDS. Yet, the newness of the issues and the controversy surrounding them make it difficult to identify, much less implement and evaluate, good programs. To help fill this gap, this chapter describes specific programs to help young people learn about HIV infection and AIDS.

Work to prevent HIV infection is too new for any particular program to have a lengthy track record of success and few structured evaluations have been conducted. Still, the strategies that follow reflect a range of promising approaches that could be replicated or adapted in other communities. To encourage networking, the name of a contact person follows each program description.

WHAT ISSUES REGARDING HIV/AIDS PROGRAMS NEED TO BE CONSIDERED?

As educators begin teaching about HIV transmission and AIDS, they need to consider what school-age children and youth need to know to make healthy behavioral choices, what type of training teachers need, and how to take learning styles and cultural differences into account.

WHAT DO CHILDREN & YOUTH NEED TO KNOW?

Children and youth need to understand the basic facts about HIV and how it is transmitted. More importantly, they need to know how to prevent HIV infection. In addition, they need to identify and change risky behaviors.

HIV/AIDS programs can provide young people with opportunities to discuss their values, develop effective decision-making strategies, build communication skills, and strengthen their willingness and ability to resist peer pressure. Young people can learn about their responsibilities to protect the health of others as well as their own. And they can gain compassion for people diagnosed with AIDS or infected with HIV.

WHAT TRAINING & INFORMATION DO TEACHERS NEED?

Teachers and staff need basic information on HIV and AIDS. Teacher training should include information on:

- Sexual development
- Sexual pressures with which youth contend

- Various sexuality-related issues, such as abortion, homosexuality, and reproductive technology (e.g., contraception and artificial insemination)

- Understanding their own beliefs in order not to "send conscious and discriminating messages to students." (Brick, 1987)

Teachers need to learn to be "knowledgeable in both the science of health and the art of health education." (Seffrin, 1988) This means that teachers must do more than simply provide content-specific information; they must also encourage students to practice healthful behaviors.

In addition to providing the necessary information on the nature of HIV infection and how to control its spread, teacher training programs should also help teachers understand their own feelings, values, and attitudes about sexuality so that teachers are comfortable discussing sex and sexuality.

The following paragraphs outline how Oregon, California, and San Diego have approached training teachers about HIV/AIDS.

The Oregon state education agency provides a minimum of eight to sixteen hours of training, as well as more assistance upon request, for all kindergarten through 12th grade teachers. Administrators, school board members, curricular specialists, and community representatives participate along with health and general classroom teachers. This team-building training uses group exercises, including role plays in which a teacher may be asked to play a person with AIDS. In their teams, participants also discuss a variety of scenarios (such as how to work with a staff member or student who is HIV positive) and develop preliminary action plans for implementing HIV prevention programs in their schools.

Contact:
Pat Ruzicka
Health Promotion Specialist
Oregon Department of Education
700 Pringle Parkway
Salem, OR 97310
(503) 378-4327

The California state education agency funds a Comprehensive Health Education Resource Center that provides information on a variety of health issues as well as HIV/AIDS. Schools can borrow films, filmstrips, videotapes, games, and software, and preview AIDS curricula.

Contact:
Priscilla Naworski, Director
California Comprehensive Health Education Resource Center
321 Wallace Avenue
Vallejo, CA 94590
(707) 557-1592

Teacher training has taken an interesting twist in the San Diego city schools. Through the "Coaches for AIDS Prevention" program, high school coaches and a student team member receive training provided jointly by the school system and the health department. The intent is to encourage coaches to discuss high-risk behaviors with their athletes and to be alert to any changes in student behavior. The agenda includes a pretest and a post test, basic AIDS information, answers to frequently asked questions, and techniques coaches can use to raise the issue of AIDS and AIDS prevention with their athletes.

Contact:
Jack Campana, Team Leader
HIV Prevention Education
Coaches Through AIDS
San Diego City Schools
2716 Marcy Avenue
San Diego, CA 92113-2395
(619) 525-7370

WHY DO LEARNING STYLES & CULTURAL DIFFERENCES NEED TO BE TAKEN INTO ACCOUNT?

Every child is different and assimilates information in unique ways. Individual differences in learning styles mean that some students learn better by seeing, some by listening, and others by doing. Some students learn better by working independently, while others flourish with teamwork.

Effective teaching, especially of a subject as personal as health, requires sensitivity to different backgrounds and learning styles. Teachers must learn to:

> recognize and accommodate different student learning styles,...organize staff inservice activities to help teachers stretch or flex into other instructional methodologies suited to differing learning styles [and] encourage diversity rather than conformity by accepting different teaching styles.... (Kleine, 1982)

In addition to learning styles, cultural differences may affect a student's education about HIV/AIDS. Racial, ethnic, regional, and religious differences may include taboos on discussing sex and homosexuality. Groups with rigidly defined sex roles may have difficulty discussing this material; these young people may be more at risk because they do not have sufficient information to make healthful decisions.

Another impediment to effective HIV/AIDS education for some minority groups, particularly blacks, is a general mistrust of the health care system. The infamous Tuskegee experiment, where blacks were left untreated so that medical researchers could study the full course of a deadly disease (syphilis), is one example of blacks being damaged by a system that was supposed to help them. (Thomas and Quinn, 1990)

Overcoming this mistrust requires that teachers, administrators, and staff understand

and respect the cultures of students and their families. It also requires using materials and programs that are relevant to diverse cultural concerns.

Health education programs, especially regarding HIV/AIDS, need to be designed "in relation to the health, social, economic, educational and cultural environment within the community and school." (Airhihenbuwa and Pineiro, 1988) All young people need the same information, yet how that information is taught can—and should—differ from community to community. The programs described in this chapter reflect a necessary diversity of approaches.

WHAT STRATEGIES & PROGRAMS CURRENTLY ARE BEING USED?

Programs to address HIV/AIDS are being developed all across the country. Some schools are effectively using straightforward classroom teaching about HIV/AIDS. Others are using new approaches: these non-traditional approaches are emphasized in this chapter.

The programs described here fall into three general categories: those that focus on peer education, those that emphasize collaboration, and those that work with people with AIDS (PWAs). There often is overlap of these categories: peer education programs may also involve interagency collaboration, and programs working with PWAs may also use peer educators and stress interagency collaboration.

PEER EDUCATION

Many educators believe that one of the most promising strategies for promoting healthful behavior among adolescents is peer education. When youth talk about a health risk—whether it is HIV/AIDS, substance abuse, or teen pregnancy—other youth are apt to listen. Adolescents, are more likely to hear what their fellow students say than what teachers, parents, or other adults say, even when the message is the same.

Organizations around the country are using peer education to teach about HIV/AIDS. These programs take four principal forms: peer counseling, teen drama and teen theater, teen conferences, and media projects.

PEER COUNSELING

Kids are "credible and accessible," says Ralph Fuccillo, director of the Prevention Center of The Medical Foundation of Boston. The Medical Foundation, with funding from the Centers for Disease Control (CDC), has developed the Peer Leadership/Preventing AIDS project that operates in both public and Catholic schools in Boston and the surrounding area.

School personnel select junior and senior high school students who show leadership ability and strong communication skills to be peer leaders. Health educators from The Medical Foundation train these young people in ten two-hour sessions over weekends and after school. Peer leaders discuss personal values, decision making, and attitudes about wellness and health. They learn the facts about HIV infection and AIDS. They also learn presentation skills and talk with someone who has AIDS. Faculty advisors receive the same training as students, as well as technical assistance from The Medical Center.

After the training, peer leaders working with faculty advisors present information on AIDS prevention in their home schools. They lead activities on decision making and provide HIV/AIDS information, especially during the AIDS Awareness Week that some schools have. For the most part, the peer educators follow lessons and activities provided by health education teachers.

Contact:
Brad Cohen, Health Educator
AIDS Education Project
The Medical Foundation
95 Berkeley Street
Boston, MA 02116
(617) 451-0049

STATS, Students Teaching AIDS to Students, affords medical students the opportunity to work with students in grades seven through twelve. A 64-page curriculum includes the use of the video, "The Subject Is AIDS," a variety of games and exercises, and three pretests and post tests for grades seven/eight, nine/ten, and eleven/twelve. The curriculum can be presented in a minimum of two one-hour sessions. According to its authors:

> The information is intended to be practical.... The purpose of open presentation of sexual issues is to provide adolescents with the tools they need to remain healthy. (Stoltz and Haven, 1988)

The curriculum (available for $7) also includes samples of a press release, a letter to the school board, a letter to parents, and a recruitment letter for medical students.

Contact:
Students Teaching AIDS to Students (STATS)
American Medical Students Association
1890 Preston White Drive
Reston, VA 22091
(703) 620-6600 or (800) 336-0158

In San Diego, the Doctors Ought to Care (DOC) project provides medical students for high school presentations. The closeness in age enables the medical students to serve as role models for high school students.

Contact:
Jack Campana, Team Leader
HIV Prevention Education
Health Services Department
San Diego City Schools
2716 Marcy Avenue
San Diego, CA 92113-2395
(619) 525-7370

In the "Teens for AIDS Prevention" program in Washington, DC, the Center for Population Options selected twelve students from each of two inner-city high schools. Faculty who expressed interest in working on the project became advisors. Students received training similar to that of the students in the Peer

Leadership/Preventing AIDS program sponsored by The Medical Foundation in Boston.

Once trained, students developed activities to influence the school environment. They were encouraged to think about who they wanted to reach, the best methods for reaching them, and the messages they wanted to communicate. Activities and projects include an HIV/AIDS information bulletin board; theatrical performances, rap songs, and skits; presentations by people with AIDS; student-designed posters; informal HIV/AIDS presentations for small groups of students; and the distribution of pamphlets, buttons, and stickers throughout the schools.

Contact:
Jennifer Hincks, Program Associate
Center for Population Options
Teens for AIDS Prevention (TAP)
1025 Vermont Avenue, N.W., Suite 210
Washington, DC 20005
(202) 347-5700

TEEN DRAMA & TEEN THEATER

In Hidalgo County, Texas, the Bilingual Teen Theater presents performances on HIV/AIDS to youth and parent groups. To be eligible for auditions, students must be enrolled in high school, have parental approval, and be able to perform two or three times a week, usually in the evenings. Being able to speak both Spanish and English is helpful but not required. Planned Parenthood staff train students about sexuality and cover such topics as self-esteem, decision making, pregnancy prevention, and HIV/AIDS prevention. A local theater group teaches acting techniques.

The students develop and write the skits they perform. Each performance consists of about five skits. After each skit, the audience asks questions of the actors/actresses both in their characters and out of them. The Bilingual Teen Theater performs throughout the Rio Grande Valley for youth and church groups, civic groups, schools, and others. Funds for training and transportation primarily come

from Planned Parenthood, supplemented by small contributions from community groups.

Contact:
Chris Lazoya, Education Director
Planned Parenthood of Hidalgo County
Bilingual Teen Theater Group
1017 Pecan Street
McAllen, TX 78501
(512) 686-0585

In Massachusetts, Planned Parenthood uses a similar approach for its Youth Expression Theater (YET), with students making a 12-month commitment to the theater troupe. The youth, under the supervision of the YET Coordinator and Drama Director, develop a series of short, unresolved, semi-improvisational skits. Audience participation follows each one-hour performance.

Contact:
Lisa Siciliano, Coordinator
Youth Expression Theater (YET)
Planned Parenthood League of Massachusetts
340 Main Street
Cambridge, MA 01608
(508) 799-5307

At least two theater groups in Washington, DC, have produced plays about HIV/AIDS. The Youth Ensemble of Everyday Theater has composed, choreographed, and produced "Till Death Do Us Part." The Latinegro Theater Collective performs "AIDS: The Reality of the Dream" for junior and senior high school youth and at local area health conferences. Both programs were described in detail in the July 28, 1988 "AIDS Education Bulletin Board" published by CCSSO's HIV/AIDS Prevention Education Project.

Contact:
Mustafaa Madyan, Associate Director
The Youth Ensemble of Everyday Theater
First and Eye Street, S.W., Room 102
P.O. Box 70570
Washington, DC 20024-0570
(202) 727-6914 or 727-6915

Enrique Aviles, Coordinator
Latinegro Theater Collective
3045 15th Street, N.W.
Washington, DC 20009
(202) 387-8611

TEEN CONFERENCES

With CDC funding, the Philadelphia school system conducted the STEP A Conference (Students Together Empowered to Prevent AIDS) in November, 1988. All 34 high schools in the city were invited to send teams consisting of the principal or vice principal, the student government and school paper faculty sponsors, the health/physical education teacher, a student government or other officer, the newspaper editor, and two other students.

The conference, held on a Saturday from 9 a.m. to 1 p.m., started with a play, "AIDS: Our Fears, Our Hopes," performed by Family Services of Philadelphia. After a discussion about the play, conference participants were divided into eight workshops to share ideas for developing HIV/AIDS awareness among students.

These workshops, led by health educators or social studies teachers, featured presentations by representatives from local organizations, including Philadelphia's AIDS Coordinating Office, the Office of Substance Abuse Prevention of the Philadelphia School District, Blacks Educating Blacks About Sexual Health Issues (BEBASHI), and Programa Esfuerzo, which works with the Latino community on health, drug abuse, and sexual issues. A special workshop for the newspaper editors and faculty sponsors focused on how to use the school media to increase understanding of HIV infection and AIDS.

After the workshops, the school teams began developing plans for HIV/AIDS prevention education activities in their respective schools. The teams completed their plans after the conference and submitted them to the STEP A sponsors (the Philadelphia Education Department's Division of Physical and Health Education) for approval and receipt of up to $1,000 for implementation. Projects included

a rap/poster contest, a special edition of the school newspaper, a peer counseling program, a theatrical production, and the purchase of sweaters and jackets with HIV/AIDS education messages printed on them, including one that read, "I don't want AIDS so please be careful."

Contact:
Catherine M. Balsley
Coordinator for AIDS Education
STEP A Conference
Division of Physical and Health Education
Stevens Administrative Center, Room 402
13th and Spring Garden Streets
Philadelphia, PA 19123-3296
(215) 351-7131

The Seattle-King County chapter of the American Red Cross and a coalition of community and educational groups have sponsored an annual student journalism conference on AIDS since 1986. The coalition includes, among others, the county department of health, the Northwest AIDS Foundation, the University of Washington School of Communications, and the Health Information Network.

At these conferences, student editors and journalists learn medical and social information about HIV/AIDS, as well as how they can provide accurate information to their peers. They learn about preventing HIV/AIDS through formal presentations; interview health care professionals, people with AIDS or their care givers, and journalists; and participate in a mock press conference with an HIV/AIDS expert.

After the conference, the student journalists write follow-up articles, which they submit as part of a contest judged by faculty of the University of Washington's School of Communications.

The conference cost approximately $1,000, including prize money, lunch, and printing and mailing conference brochures. Funds and in-kind contributions came from local businesses and individual presenters.

The Seattle Red Cross, with funds from Genetic Systems Corporation, has developed a computer software package (including an instruction manual) to help other communities develop and sponsor similar conferences. The package is available for $50.

Contact:
Pendexter Macdonald, AIDS Project Specialist
Seattle-King County Chapter
American Red Cross
1900 25th Avenue South
Seattle, WA 98144-4708
(206) 323-2345

MEDIA PROJECTS

Peer Education Health Resources (PEHR) is an educational media agency based in Minneapolis. Begun in the 1970s, PEHR has been a pioneer in the area of peer health education for youth, and now uses video to support peer education.

PEHR's videotape, "All of Us and AIDS," was made through a partnership of teens and film makers. Through PEHR, inner-city youth attending alternative schools met once a week for two months to brainstorm with medical personnel, health educators, and writers about the video. These same and other teens then auditioned to act in the video. Although a professional crew made the video, teens were active participants in all aspects of its creation, including helping to develop and write the script.

Contact:
Catherine Jordan, Executive Director
Peer Education Health Resources
P. O. Box 3262
Traffic Station
Minneapolis, MN 55403
(612) 823-6257

COLLABORATION

No one agency, department, or community group can provide comprehensive HIV/AIDS prevention programs single-handedly. Following are examples of collaborative efforts at both the state and local levels.

In Michigan, an interagency agreement among seven state agencies supports a single

comprehensive school health curriculum known as the Michigan Model. The seven agencies include a mix of both traditional and nontraditional agencies—public health, mental health, social services, education, substance abuse, health and medical affairs, and the state police. A statewide steering committee provides program guidance, monitoring, and oversight, and reviews evaluation results of the Michigan Model, into which HIV/AIDS prevention education has been incorporated.

Staff at the departments of education and public health serve as the fiscal agents; they also evaluate the curriculum and conduct research. The departments of social services and mental health staff jointly sponsored train-the-trainers workshops on substance abuse counseling to help locally based school health personnel, counselors, and health department AIDS coordinators develop strategies for collaboration. The Office of Substance Abuse hired the workshop trainers.

Ownership of the Michigan Model is shared among the agencies. The interagency agreement specifically states that each participating agency agrees that the curriculum will:

- Build on the systems approach of the Centers for Disease Control model and be supplemented by elements of other models
- Meet the minimum criteria and objectives of each participating agency
- Be considered for endorsement by each participating agency upon the recommendation of the steering committee
- Be developed by a steering committee that will include representation from each participating agency and make final recommendations regarding the curricular components. (Michigan Interagency Letter, 1983)

Contact:
Don Sweeney
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Michigan Model
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(517) 335-8390

Pat Nichols
Health Education Consultant
Comprehensive School Health Unit
Department of Education
School Program Services
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Lansing, MI 48909
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Interagency cooperation is the hallmark of the effort of three towns in Texas (Brownsville, Harlingen, and McAllen) that joined together two years ago to form the not-for-profit Valley AIDS Council (VAC). VAC's mission is to prevent the spread of AIDS in the Rio Grande Valley by providing training and information to health care and social service providers, educators, and students.

Recognizing that the community was responding to HIV/AIDS in a fragmented way, several health-based community groups (including Planned Parenthood and the local chapter of the American Red Cross) and the local health department created VAC. This multiservice organization provides assistance through school involvement, minority outreach, media education, and a speakers' bureau.

Agencies and individuals on the VAC Board of Directors represent the broad cross section of interests of the community. These include Planned Parenthood, the Texas Education Agency, the American Red Cross local chapter, a private hospital, as well as the state hospital located in one of the four counties covered by VAC, the Texas Department of Health, Legal Aid, and a Hispanic health education program. Funding for VAC comes from the Texas Department of Health and the Levi Strauss

company, which operates a plant in the community.

VAC also works directly in schools, providing teacher training and instruction on HIV/AIDS prevention to students. In two communities, VAC is a member of the school curriculum committee, helping schools develop appropriate HIV/AIDS-related education programs.

VAC conducts extensive minority outreach, especially through the Migrant Council's Head Start program. Staff members work with parents on HIV/AIDS prevention strategies as well as parenting skills and carefully take into account cultural attitudes about sex among the predominantly Hispanic population. VAC is also planning to undertake activities with the United Farmworkers.

VAC staff distribute bilingual flyers to businesses, as well as at laundromats and clinics. VAC staff encourage home meetings where parents can talk and ask questions informally and without their children present.

Working with local employers, VAC also sponsors programs to educate employees about HIV/AIDS.

VAC has also developed public service announcements and participated in radio and television current affairs programs.

Contact:
Ted Eidson, Executive Director
Valley AIDS Council (VAC)
2220 Haine Drive, Suite 45
Harlingen, TX 78550
(512) 428-9322

San Francisco's Unified School District receives CDC funds for its AIDS Education for Youth Project, which includes a focus on out-of-school youth. During the past year, the Youth AIDS Art Project was organized by the school system, the department of public health's forensic unit at the juvenile detention center, two group homes for homeless and

runaway youth, and an emergency shelter for homeless youth.

Twelve youth groups participated in a billboard design project entitled, "A Message from Youth on AIDS: Spread the Word, Not the Disease." The young artists received assistance from the AIDS Art Project and the five coordinating groups on advertising and marketing concepts, graphics, and imagery. The five sponsoring organizations also provided AIDS education to the young people.

Three semifinalists from each of the twelve participating agencies were selected. The 36 semifinalists' designs were judged by area individuals, including someone with AIDS, a member of the media, a representative of the mayor's office, and the superintendent of schools. The winners were announced at a reception where all 36 works were hung. The four winners received prizes ranging from $75 to $250.

The winning design will appear on billboards and city buses and in local commercial establishments. Funding for the project came from the school system, the San Francisco Junior League, the San Francisco Art Commission, the AIDS Clearance Fund, and area businesses. The five-agency coalition has plans to develop an information packet for others interested in sponsoring a similar project.

Also through the school system, health educators are working with high school dropouts in the San Francisco Conservation Corps to provide sexuality and AIDS education classes.

Contact:
Mei Lam, Administrator
AIDS Education for Youth Project
San Francisco Unified School District
1512 Golden Gate Boulevard
San Francisco, CA 94115
(415) 749-3400

In Seattle, interagency collaboration is the norm. Seattle public school AIDS Education Program Consultant Pamela Hillard says there is "an established climate of networking in which organizational representatives have tremendous respect for one another and a desire for excellence." This cooperation had begun before the HIV/AIDS epidemic and easily incorporated HIV/AIDS into their ongoing collaborative activities.

The most recent evidence of city-wide cooperation is the development and pilot-testing of a peer education program. The Coalition for AIDS Peer Education (CAPE) is a group of ten agencies representing the school system, public health, Planned Parenthood, the American Red Cross, the gay and lesbian community, dropout and homeless youth, and a minority AIDS advocacy group. Combined, these groups represent more than 25,000 annual contacts with teens in the Seattle area, including teens who are in and out of school, white and minority, and gay, lesbian, and heterosexual.

Each of the seven pilot sites of the peer education program is served by two agencies that share responsibility for organizing and directing the program. These sites include three high schools, two alternative schools, a gay and lesbian teen rap group, and a center for homeless youth. The two-day peer education training program for students includes information on adolescent development, sexuality, AIDS, and drugs. Teens also make site visits to such places as the public health department, an AIDS support group, a sexually transmitted disease clinic, the Children's Hospital, Planned Parenthood, the offices of People of Color Against AIDS, and the Rubber Tree, a store that sells condoms.

Some of the features that CAPE believes will contribute to the success of this peer education project are the coalition's focus on minority and high-risk youth, inclusion of persons with AIDS, strong ongoing relationships between an expert adult AIDS

educator and the student peer educators, and participation of both in-and out-of-school youth.

Contact:
Pamela Hillard
AIDS Education Program Consultant
Seattle Public Schools
815 Fourth Avenue North
Seattle, WA 98109-9985
(206) 281-6862

The Los Angeles Unified School District provides funds (provided by the Centers for Disease Control) to the Urban League and AVANCE, formerly the East Los Angeles Rape Hotline, both of which have strong ties to the black and Hispanic communities. These groups are also members of the school district's AIDS advisory committee.

Staff from both organizations participate in all AIDS teacher training seminars to gain information about HIV/AIDS. They also have access to all curricular materials and other information produced by the school district.

In turn, representatives from both groups conduct community workshops in churches, health and drug clinics, and other facilities. School dropouts are a primary target population of these meetings. One particularly effective location is the local health fair. There youth have easy access to free medical services and information, no one asks them a lot of questions, and they do not have to stand in long lines.

AVANCE also sponsors a theater group to reach dropouts, teachers, parents, schools, and local helping agencies. Out-of-school youth frequently react much more positively to theatrical performances than to didactic teaching. Information that troupe members learn from teacher workshops is used to create AIDS-related vignettes used in performances that are given throughout the Hispanic community.

Contact:
Gloria Ornelas
Educational Program Specialist
AVANCE
Human Services, Incorporated
5350 Beverly Boulevard
Los Angeles, CA 90022
(213) 726-2201

PEOPLE WITH AIDS

"A student's increased awareness of his or her own risk for HIV infection stimulates active and positive prevention behaviors." This is an underlying premise of the Wedge AIDS Education Program developed by the City and County of San Francisco Department of Public Health. An opportunity for frank dialogue and interaction with a person with AIDS (PWA) reaches students at a personal, emotional level, promoting self-awareness as well as compassion for others.

The goal of the Wedge program is to stop the spread of HIV infection among adolescents. The program complements established high school family life education and related courses. It provides a framework to integrate factual information with personal accounts of experience with HIV infection and AIDS. A series of four presentations led by a team of trained speakers includes basic facts and concepts about HIV and risks, discussions, exercises, and personal histories. Through these presentations, the student is helped to recognize his or her level of risk for HIV infection.

The goals of the Wedge program are:

- To increase factual information about AIDS, the AIDS virus, and its transmission
- To reduce fear and misinformation about AIDS
- To help teenagers delay the initiation of sexual intercourse
- To educate youth about risk reduction measures

- To provide an opportunity for youth to understand and integrate AIDS prevention information

- To promote awareness, understanding, and acceptance of the personal and social aspects of living with AIDS

- To reduce experimentation with drugs and prevent intravenous (IV) drug use and the use of shared needles.

Each of the Wedge presenters (medical professionals, health educators, persons with AIDS, and others) participates in a two-day training and orientation session before being assigned to a classroom.

The first session, conducted by a medical professional or health educator, presents a basic description of communicable diseases and explains how HIV infection affects the immune system. Methods of HIV transmission are explained, and prevention strategies are discussed.

In the second session, a health educator leads activities that focus on decision-making skills and clarification of values. Students also identify behaviors that put them at risk for HIV infection.

When a person with AIDS leads the third session, students gain a personal perspective on the impact of the AIDS epidemic. This person addresses myths and misconceptions that students may have about AIDS. The session sensitizes students to the psychological and social aspects of living with HIV infection and AIDS-related illnesses.

In the fourth and final session, the health educator provides an opportunity for students to discuss their impressions and what they have learned from the previous sessions. Prevention strategies are again discussed, and the educator informs students about

community resources for further AIDS information.

Contact:
Wedge Project
AIDS Office
25 Van Ness, 5th Floor
San Francisco, CA 94102
(415) 554-9000

Although the Wedge program was designed to complement high school family life education classes, it can be used in other classroom settings. In the New Haven, Connecticut Public Schools during the 1988-89 school year, the Wedge program was used in conjunction with eleventh grade history classes and twelfth grade English classes.

Letters from students to the people with AIDS with whom they had spent the third day of instruction reflect an increase in compassion for persons living with AIDS, decreased bias towards populations often associated with AIDS, and a greater awareness of their own vulnerability. In the 1989-90 school year, the Wedge program was added to a required ninth grade life skills class.

Contact:
Mickey Kavanaugh, Social Development
Facilitator Responsible for AIDS Education
c/o Hill House High School
480 Sherman Parkway
New Haven, CT 06511
(203) 777-5821

* * * * * * *

The programs outlined in this chapter provide a sampling of the creativity and ingenuity that school districts and communities across the country are using to address HIV/AIDS. Although some programs are in the context of broader health concerns and others focus solely on HIV and AIDS, all make clear that providing good health programs for young people requires new partnerships among schools, parents, and community agencies and organizations.

It is the Council of Chief State School Officers' hope that the information in this chapter will help other schools and states develop effective strategies and programs to address HIV infection among young people.

No institution touches the lives of more citizens than the education system.... Communities across our nation are taking advantage of this opportunity to link health and education.

National Health/Education Consortium, 1990

CONCLUSION

An effective school health program for the 1990s goes far beyond the outdated image of a health room, an occasional visit by a school nurse, and a one-time health education course. Because of the critical link between health and learning—and the poor health of so many young people—schools are, of necessity, important players in meeting the health needs of students.

Sometimes schools provide direct services. Sometimes they are the first to identify a child's health problem. They are always a primary place where children learn about health—through example as well as classroom instruction.

In the years ahead, the CCSSO HIV/AIDS Prevention Education Project will continue to work with states to make the critical link between health and education. This connection—while most important for young people at risk of school failure as well as poor health—is vital to the Council's efforts to ensure educational success for all students.

REFERENCES

I. Putting Health Programs in the School Context

Burke, Donald S.; Brundage, John F.; Goldenbaum, Mary; Gardner, Lytt I.; Peterson, Michael; Visintine, Robert; Renfield, Robert R.; and the Walter Reed Retovirus Research Group. "Human Immunodeficiency Virus Infections in Teenagers: Seroprevalence Among Applicants for US Military Service," *Journal of the American Medical Association*, Vol. 263, No. 15, April 19, 1990. (Burke et al., 1990)

Carnegie Council on Adolescent Development. "The Potential of School-Linked Centers to Support Adolescent Health and Development: An Assessment Prepared by Council Staff," Washington, DC, April 1988. (Carnegie Council on Adolescent Development, 1988)

Carnegie Foundation for the Advancement of Teaching. *The Condition of Teaching: A State-by-State Analysis*, Princeton, NJ, 1988. (Carnegie Foundation for the Advancement of Teaching, 1988)

Center for Population Options. "School-Based Clinics Increasing," *Options*, Vol. 1, Issue 3, Washington, DC, Winter, 1989. (Center for Population Options, 1989)

Centers for Disease Control, "HIV/AIDS Surveillance: U.S. AIDS Cases Reported Through October 1990," Atlanta, GA, November 1990. (Centers for Disease Control, 1990)

Children's Defense Fund. *A Manual on Providing Effective Prenatal Care for Teens*, Washington, DC, 1985. (Children's Defense Fund, 1985)

Council of Chief State School Officers. *A Guide for State Action: Early Childhood & Family Education*, Washington, DC, 1988. (Council of Chief State School Officers, 1988)

D'Angelo, Lawrence; Getson, P.; Luban, N.; Stallings, E.; and Gayle, H. "HIV Infection in Adolescents: Can We Predict Who Is at Risk?," poster presentation at the Fifth International Conference on AIDS, June 1989. (D'Angelo et al., 1989)

Dryfoos, Joy G. "Working Paper: Youth at Risk: One in Four in Jeopardy: Report Submitted to the Carnegie Corporation," Hastings-on-Hudson, NY, June 1987. (Dryfoos, 1987)

Kolbe, Lloyd J. "Why School Health Education? An Empirical Point of View," presented at the Delbert Oberteuffer Centennial Symposium, Atlanta, GA, April, 1985. (Kolbe, 1985)

Lovato, Chris Y.; Allensworth, Diane DeMuth; and Chan, Frances Amanda. *School Health in America: An Assessment of State Policies to Protect and Improve the Health of Students*, 5th Edition, Kent, OH, 1989. (Lovato et al., 1989)

Miller, C. Arden; Fine, Amy; and Adams-Taylor, Sharon. *Monitoring Children's Health: Key Indicators*, Washington, DC, 1989. (Miller et al., 1989)

National Education Association. *The Relationship Between Nutrition and Learning*, Washington, DC, 1989. (National Education Association, 1989)

National Institute on Drug Abuse. *Drug Abuse Prevention*, Washington, DC, 1980. (National Institute on Drug Abuse, 1980)

Newacheck, Paul W. "Improving Access to Health Services for Adolescents from Economically Disadvantaged Families," *Pediatrics*, Vol. 84, No. 4, October 1989. (Newacheck, 1989)

Newacheck, Paul W. and McManus, Margaret M. "Health Insurance Status of Adolescents in the United States," *Pediatrics*, Vol. 84, No. 4, October 1989. (Newacheck and McManus, 1989)

Peng, Samuel S., National Center for Health Statistics. "High School Dropouts: Descriptive Information from High School and Beyond," a special data analysis prepared for the Equality Center based on data from the "High School and Beyond" survey, Washington, DC, 1983. (Peng, 1983)

Quinn, Thomas C.; Glasser, David; Cannon, Robert O.; Matuszak, Diane L.; Dunning, Richard W.; Kline, Richard L.; Campbell, Carl H.; Israel, Ebenezer; Fauci, Anthony S.; and Hook, Edward W. "Human Immunodeficiency Virus Infection Among Patients Attending Clinics for Sexually Transmitted Diseases," *The New England Journal of Medicine*, Vol. 318, No. 4, January 28, 1988. (Quinn et al., 1988)

Ross, J. G. and Gilbert, G. G. "Summary of Findings: National Children and Youth Fitness Study," *Journal of Health, Physical Eduction, Recreation and Dance*, January 1985. (Ross and Gilbert, 1985)

U. S. Conference of Mayors. *A Status Report on Children in American Cities: A 52-City Survey*, Washington, DC, October 1988. (U.S. Conference of Mayors, 1988)

U.S. Department of Education. *What Works: Schools Without Drugs: The Challenge*, Washington, DC, May 1987. (U.S. Department of Education, 1987)

U.S. Department of Health and Human Services. *Child Sexual Abuse Prevention*, Washington, DC, 1984. (U.S. Department of Health and Human Services, 1984)

U.S. Department of Health and Human Services. *Health United States*, 1987. Hyattsville, MD, 1988. (U.S. Department of Health and Human Services, 1988)

II. Looking at the Health Needs of Children & Youth

American Humane Association. "Highlights of Official Child Neglect and Abuse Reporting," 1984, Denver, CO, 1986. (American Humane Association, 1986)

American School Health Association, Association for the Advancement of Health Education, and Society for Public Health Education. *The National Adolescent Student Health Survey: A Report on the Health of America's Youth*, Reston, VA, August 1989. (American School Health Association et al., 1989)

Burke, Donald S.; Brundage, John F.; Goldenbaum, Mary; Gardner, Lytt I.; Peterson, Michael; Visintine, Robert; Renfield, Robert R.; and the Walter Reed Retovirus Research Group. "Human Immunodeficiency Virus Infections in Teenagers: Seroprevalence Among Applicants for US Military Service," *Journal of the American Medical Association*, Vol. 263, No. 15, April 19, 1990. (Burke et al., 1990)

Centers for Disease Control. "Estimates of HIV Prevalence and Projected AIDS Cases; Summary of a Workshop, October 31-November 1, 1989," *Morbidity and Mortality Monthly Report*, Vol. 39, No. 7, February 23, 1990. (Centers for Disease Control, 1990a)

Centers for Disease Control, "HIV/AIDS Surveillance: U.S. AIDS Cases Reported Through October 1990," Atlanta, GA, November 1990. (Centers for Disease Control, 1990b)

Centers for Disease Control. *Sexually Transmitted Diseases Annual Report, 1989*. Atlanta, GA, 1989. (Centers for Disease Control, 1989)

Children's Defense Fund. "Adolescent Pregnancy: An Anatomy of a Social Problem in Search of Comprehensive Solutions," Washington, DC, 1987. (Children's Defense Fund, 1987)

Damberg, Cheryl L. "Strategies for Promoting the Health of Minorities: The School-Age Population," *Health Values*, Vol. 10, No. 3, 1986. (Damberg, 1986)

D'Angelo, Lawrence; Getson, P.; Luban, N.; Stallings, E.; and Gayle, H. "HIV Infection in Adolescents: Can We Predict Who Is at Risk?," poster presentation at the Fifth International Conference on AIDS, June 1989. (D'Angelo et al., 1989)

Harris, Louis and Associates, Inc. *American Teens Speak: Sex, Myths, TV and Birth Control*, New York, 1986. (Harris, 1986)

Hobbs, N.; Perrin, J. M.; and Ireys, H. T. *Chronically Ill Children and Their Families*, San Francisco, 1985. (Hobbs et al., 1985)

McBride, Nicholas. "Violence Cited in Lagging Life Expectancy Among U.S. Blacks," *Christian Science Monitor*, December 27, 1988. (McBride, 1988)

Metropolitan Life Foundation, Louis Harris and Associates. *Health: You've Got to Be Taught*, New York, 1989. (Metropolitan Life Foundation, 1989)

Miller, C. Arden; Fine, Amy; and Adams-Taylor, Sharon. *Monitoring Children's Health: Key Indicators*, Washington, DC, 1989. (Miller et al., 1989)

National Association of Children's Hospitals and Related Institutions. *Profile of Child Health in the United States*, Washington, DC, 1989. (National Association of Children's Hospitals, 1989)

National Center for Health Statistics. "Advance Report of Final Natality Statistics, 1986," *Monthly Vital Statistics*, Report 37(July), Washington, DC, 1988. (National Center for Health Statistics, 1988)

National Education Association. *The Relationship Between Nutrition and Learning*, Washington, DC, 1989. (National Education Association, 1989)

Needleman, Herbert L.; Schell, Alan; Bellinger, David; Leviton, Alan; and Allred, Elizabeth N. "The Long-Term Effects of Exposure to Low Doses of Lead in Childhood," *New England Journal of Medicine*, Vol. 322, No. 2, January 11, 1990. (Needleman et al., 1990)

Quinn, Thomas C.; Glasser, David; Cannon, Robert O.; Matuszak, Diane L.; Dunning, Richard W.; Kline, Richard L.; Campbell, Carl H.; Israel, Ebenezer; Fauci, Anthony S.; and Hook, Edward W. "Human Immunodeficiency Virus Infection Among Patients Attending Clinics for Sexually Transmitted Diseases," *The New England Journal of Medicine*, Vol. 318, No. 4, January 28, 1988. (Quinn et al., 1988)

U.S. Department of Health and Human Services, National Center for Health Statistics. "Deaths and Death Rates for Suicide Ages 15-24 Years, by Race and Sex, United States, 1960-1985," unpublished data, 1987. (U.S. Department of Health and Human Services, 1987)

U.S. Department of Health and Human Services, Office of Human Development Services. "Study of National Incidence and Prevalence of Child Abuse and Neglect: 1988," 1988. (U.S. Department of Health and Human Services, 1988)

U.S. Department of Health and Human Services, Public Health Service. *Drug Use, Drinking, and Smoking: National Survey Results from High School, College, and Young Adult Populations: 1975-1988*, 1989. (U.S. Department of Health and Human Services, 1989)

U.S. Department of Health and Human Services, Public Health Service. *Health United States*, 1989, Hyattsville, MD, March 1990. (U. S. Department of Health and Human Services, 1990)

U.S. House of Representatives, Select Committee on Children, Youth, and Families. "Abused Children in America: Victims of Official Neglect," Washington, DC, March 1987. (U.S. House of Representatives, 1987)

U.S. House of Representatives, Select Committee on Children, Youth, and Families. "Eating Disorders—The Impact on Children and Families," Washington, DC, 1988. (U.S. House of Representatives, 1988)

U.S. House of Representatives, Select Committee on Children, Youth,and Families. "AIDS and Young Children in Florida—Fact Sheet," Washington, DC, August 7, 1989. (U.S. House of Representatives, 1989)

Zill, Nicholas and Schoenborn, Charlotte A., Centers for Disease Control. "Developmental, Learning, and Emotional Problems: Health of Our Nation's Children, United States, 1988," Hyattsville, MD, 1990. (Zill and Schoenborn, 1990)

III. Understanding the Characteristics & Components of Comprehensive School Health Programs

American Academy of Pediatrics, Committee on School Health. "Qualifications and Utilization of Nursing Personnel Delivering Health Services in Schools," Pediatrics, Vol. 79, No. 4, April, 1987. (American Academy of Pediatrics, 1987)

American Association of School Administrators. *Why School Health?*, Arlington, VA, 1987. (American Association of School Administrators, 1987)

American Nurses' Association, "Standards of School Health Nursing Practice," Kansas City, MO, 1983. (American Nurses' Association, 1983)

Blair, Steven N.; Tritsch, Leonard; and Kutsch, Suzanne. "Worksite Health Promotion for School Faculty and Staff," *Journal of School Health*, Vol. 57, No. 10, December 1987. (Blair et al., 1987)

Center for Population Options. "School-Based Clinics Increasing," *Options*, Vol. 1, Issue 3, Washington, DC, Winter, 1989. (Center for Population Options, 1989)

Connell, David B.; Turner, Ralph R.; and Mason, Elaine F. "Summary of Findings of the School Health Education Evaluation: Health Promotion Effectiveness, Implementation, and Costs," *Journal of School Health*, Vol. 55, No. 8, October 1985. (Connell et al., 1985)

Errecart, Michael T.; Walberg, Herbert J.; Ross, James G.; Gold, Robert S.; Fiedler, John L.; and Kolbe, Lloyd J. "Effectivenes of Teenage Health Teaching Modules," *Journal of School Health: A Special Insert*, Vol. 61, No. 1, January 1991. (Errecart et al., 1991)

Fine, Michelle. "De-Institutionalizing Educational Inequity," *School Success for Students at Risk: Analysis and Recommendations of the Council of Chief State School Officers*, Harcourt Brace Jovanovich, Orlando, 1988. (Fine, 1988)

Freedman, Steve A.; Klepper, Brian R.; Duncan, R. Paul; and Bell III, Samuel P. "Sounding Board: Coverage of the Uninsured and Underinsured," *The New England Journal of Medicine*, Vol. 318, No. 13, March 31, 1988. (Freedman et al., 1988)

Kolbe, Lloyd J.; Allensworth, Diane D.; Lovato, Chris Y.; Hogan, Patricia E.; and Cooke, Bryan E. M. *School Health in America: An Assessment of State Policies to Protect and Improve the Health of Students*, Kent, OH, 1986. (Kolbe et al., 1986)

Lohrmann, David K.; Gold, Robert S.; and Jubb, Wanda H. "School Health Education: A Foundation for School Health Programs," *Journal of School Health*, Vol. 57, No. 10, December 1987. (Lohrmann et al., 1987)

Lovick, Sharon R. and Stern, Renee Freedman. "School-Based Clinics: 1988 Update," *Options*, 1988. (Lovick and Stern, 1988)

Lovick, Sharon R. and Wesson, Wanda F. "School-Based Clinics: Update," *Options*, 1986. (Lovick and Wesson, 1986)

Mason, James O. "Forging Working Partnerships for School Health Education," *Journal of School Health*, Vol. 59, No. 1, January 1989. (Mason, 1989)

Metropolitan Life Foundation, Louis Harris and Associates. "Summary: Health: You've Got to Be Taught: An Evaluation of Comprehensive Health Education in American Public Schools," New York, 1988. (Metropolitan Life Foundation, 1988)

Neckerman, Kathryn M. and Wilson, William Julius. "Schools and Poor Communities," *School Success for Students at Risk: Analysis and Recommendations of the Council of Chief State School Officers*, Harcourt Brace Jovanovich, Orlando, 1988. (Neckerman and Wilson, 1988)

Nelson, Gary D.; Cross, Floy S.; and Kolbe, Lloyd J. "Introduction: Teenage Health Teaching Modules," *Journal of School Health: A Special Insert*, Vol. 61, No. 1, January 1991. (Nelson et al., 1991)

Pine, Patricia, American Association of School Administrators. *Promoting Health Education in Schools—Problems and Solutions*, Arlington, VA, 1985. (Pine, 1985)

Schorr, Lisbeth B. *Within Our Reach*, Doubleday, New York, 1988. (Schorr, 1988)

Vincent, Murray L.; Clearie, Andrew F; and Schluchter, Mark D. "Reducing Adolescent Pregnancy Through School and Community-Based Education," *Journal of the American Medical Association*, Vol. 257, No. 24, June 26, 1987. (Vincent et al., 1987)

Wisconsin Department of Public Instruction. "School Nursing in Wisconsin," Bulletin No. 6424, Madison, WI, 1986. (Wisconsin Department of Public Instruction, 1986)

IV. Addressing HIV/AIDS Through School Strategies & Programs

Airhihenbuwa, C. O. and Pineiro, O. "Cross-Cultural Health Education: A Pedagogical Challenge," *Journal of School Health*, Vol. 58, 1988. (Airhihenbuwa and Pineiro, 1988)

Brick, P. "AIDS Forces the Issue: Crisis Prevention or Education in Sexuality?" *Curriculum Update*, Association for Supervision and Curriculum Development, Alexandria, VA, 1987. (Brick, 1987)

Kleine, P. F. "Teaching Styles and Teaching Roles," *Encyclopedia of Educational Research*, 5th ed., New York, The Free Press, 1982. (Kleine, 1982)

"Michigan Interagency Letter of Cooperation." Departments of Education, Mental Health, Public Health, Highway Safety Planning, and Office of Substance Abuse Services, Lansing, MI, 1983. (Michigan Interagency Letter, 1983)

Seffrin, J. "Year 2000 Health Objectives for the Nation: Recommendations for the School Health Program," testimony presented before the U.S. Public Health Service and the American Alliance for Health, Physical Education, Recreation, and Dance, 1988. (Seffrin, 1988)

Stoltz, J. and Haven, G., American Medical Association. *Students Teaching AIDS to Students Curriculum*, Reston, VA, 1988. (Stoltz and Haven, 1988)

Thomas, Stephen and Quinn, Sandra. "The Tuskegee Syphilis Study 1932-1972: Implications for HIV Education and AIDS Risk Reduction in the Black Community," paper presented to the annual meeting of the American Public Health Association, October 1990. (Thomas and Quinn, 1990)

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